# The OPV Roundtable (Summary)

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**The available evidence shows that OPV can do the job nearly everywhere when it is used properly.**
**However in certain tropical regions with poor sanitation, multiple OPV doses do not result in adequate immunity.**

**The reason for this is unknown but could be related to either a low fitness of OPV strains (too low rate of "takes" under certain conditions) or suboptimal vaccination policy, or both.**

**It is hoped that better results can be achieved by changes in vaccination strategy, e. g., by a higher coverage with routine trivalent and monovalent OPV vaccination combined with appropriately timed mass vaccination.**

**When used properly, OPV exhibits a reasonably high level of safety, triggering only exceptionally rare cases of vaccine-associated poliomyelitis.**

**On the other hand, OPV is genetically unstable and rapidly loses its attenuating mutations.**
**After some evolution, OPV strains acquire phenotypic properties very similar, if not identical, to those of wild polioviruses.**

**These OPV derivatives (VDPV) can circulate like wild polioviruses and induce sporadic cases as well as, in populations with a low immunity, outbreaks of the disease.**
**VDP may be converted into endemic strains.**

**The current Nigerian experience suggests that the WHO-adopted "1% divergence" criterion for VDPV is not warranted.**

**It is quite probable that sources of VDPV potentially able to infect naïve persons do, and will, exist until OPV is used and for a significant period of time beyond.**
**Such sources include rare immunodeficient and apparently healthy long-term excretors as well as overtly or cryptically circulating vaccine derivatives.**

**It was argued that because of this circumstance, any antipolio strategy generating unprotected human populations is not acceptable, at least in the foreseeable future.**

**An opinion was expressed that eradication of just wild polioviruses is not a critical issue, if vaccine derivatives are continuing to circulate**

***and***

**that certification of such an achievement does not make much sense.**

There are several poorly understood OPV-related issues, whose solution could potentially be of significant practical importance.
In particular, the reason(s) for inadequate OPV immunogenicity in certain regions should be investigated.

Among different hypothetical explanations of this failure, one posits that it is related to a relatively low fitness of OPV strains. Elucidation of the relationship between attenuation of neurovirulence and a decrease in general fitness of OPV viruses would be important.

These and some other uncertainties require strong fostering of polio research, which had been adversely affected by untimely and unwarranted containment restrictions.